IN THE CLAIMS

Please amend the claims to read as indicated herein.

1. (previously presented) A method for correcting a measured signal transmitted through a system, said method comprising:

sampling said measured signal to yield a sampled signal sequence;

reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence;

appending said plurality of copies to one another to yield a signal series;

windowing said signal series with a window function to yield a windowed signal series; and

recalculating a corrected measured signal from said windowed signal series using information about a frequency-dependency of said system.

2. (previously presented) The method of claim 1, wherein said recalculating a corrected measured signal from said windowed signal further comprises:

transforming said windowed signal series from a time domain into a frequency domain to yield a transformed signal series;

modifying said transformed signal series with a transfer function as a function of frequency of said system to yield a modified transformed signal series;

re-transforming said modified transformed signal series back from said frequency domain into said time domain to yield a re-transformed signal series; and

receiving said corrected measured signal from said re-transformed signal series.

3. (previously presented) The method of claim 1, wherein said recalculating a corrected measured signal from said windowed signal further comprises modifying said corrected measured signal with a function inverse to said window function.

4. (previously presented) The method of claim 2, wherein said receiving said corrected measured signal from said re-transformed signal series further comprises selecting a corrected signal sequence from said re-transformed signal series substantially corresponding to said sampled signal sequence.

5. (previously presented) The method of claim 4, wherein said selected corrected signal sequence is selected substantially from a middle range of said re-transformed signal series.

6. (previously presented) The method according to claim 1, wherein said sampling said measured signal is executed by a measuring device at a highest accuracy provided by said measuring device.

7. (previously presented) A method for correcting a measured signal transmitted through a system having a transfer function as a function of frequency, said method comprising:

sampling said measured signal to yield a sampled signal sequence;

reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal
sequence;

appending said plurality of copies to one another to yield a signal series;

windowing said signal series with a window function to yield a windowed signal series;

transforming said windowed signal series from a time domain into a frequency domain to yield a
transformed signal series;

modifying said transformed signal series with said transfer function of said system to yield a
modified transformed signal series;

re-transforming said modified transformed signal series back from said frequency domain into
said time domain to yield a re-transformed signal series; and

receiving a corrected measured signal from said re-transformed signal series.

8. (previously presented) A method for providing a measured signal for further processing, said method comprising:

sampling said measured signal to yield a sampled signal sequence;

reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal
sequence;

appending said plurality of copies to one another to yield a signal series; and

processing said signal series to determine a characteristic of said measured signal.

9. (currently amended) A ~~data carrier~~ computer-readable medium, comprising:

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a program that controls a processor to execute a method that includes:

 sampling a measured signal that is transmitted through a system, to yield a sampled signal sequence;

 reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence;

 appending said plurality of copies to one another to yield a signal series;

 windowing said signal series with a window function to yield a windowed signal series; and

 recalculating a corrected measured signal from said windowed signal series using information about a frequency-dependency of said system.

10. (previously presented) An apparatus for executing a method for correcting a measured signal, said apparatus comprising:

 a sampling device for sampling said measured signal to yield a sampled signal sequence;

 a signal multiplication unit for reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence, and appending said plurality of copies to one another to yield a signal series;

 a device for performing windowing functions for windowing the signal series with a window function to yield a windowed signal series; and

 a recalculation unit for recalculating a corrected measured signal from said windowed signal series using information about a frequency-dependency of said system.

11. (previously presented) An apparatus for correcting a measured signal transmitted through a system comprising:

 means for sampling said measured signal to yield a sampled signal sequence;

 means for reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence;

 means for appending said plurality of copies to one another to yield a signal series;

 means for windowing said signal series with a window function to yield a windowed signal series; and

 means for recalculating a corrected measured signal from said windowed signal series using information about a frequency-dependency of said system.

12. (previously presented) The method of claim 1, wherein said measured signal is a high speed digital pulse.

13. (previously presented) The method of claim 7, wherein said measured signal is a high speed digital pulse.

14. (previously presented) The method of claim 8, wherein said measured signal is a high speed digital pulse.

15. (previously presented) The apparatus of claim 11, wherein said measured signal is a high speed digital pulse.